

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027085**Date Inspected:** 19-Jan-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** jobsite**CWI Name:** Bernard Docena**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS project**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above.

This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and /or monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Skyway Bike Path Expansion Joint Modification, Contract Change Order (CCO) 193:

This QA Inspector observed ABF welding personnel Jason Collins (#8128) and QC Inspector Bernard Docena working at Hinge-B, East bound performing work relating to CCO 193. QC Inspector Bernard Docena informed this QA Inspector that ABF welding personnel Jason Collins used the Shielded Metal Arc Welding (SMAW) process to tack weld a 12.7 mm thick plate onto the trolley rail where a section of angle iron was to be fit up and welded on top of the plate. QC Inspector Bernard Docena informed this QA Inspector he had verified the welding parameters as follows; 130 amperes. QC Inspector Bernard Docena informed this QA Inspector the welding had been performed in accordance with ABF-WPS-D15-F1200A. This QA Inspector observed a heated electrode storage container was at the jobsite containing 3.2 mm diameter E7018H4R electrodes.

QC Inspector Bernard Docena informed this QA Inspector the work being performed appeared to be for ABF-RFI-002696R00, which contained sketch SK-2696R0-1. QC Inspector Bernard Docena informed this QA Inspector he had reviewed the sketch and observed the following issues: (1) there are no welding details for the 12.7 mm X 76 mm plate that had been tack welded into position (2) there is a detail for a Partial Joint Penetration (PJP) weld at the top of the 12.7 X 76 mm plate, but the configuration of the bike path structure does not provide

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access for this welding (3) the sketch is for Hinge-C and the work is being performed at Hinge-B. QC Inspector Bernard Docena informed this QA Inspector he had informed his supervisor (Bill Norris) of the issues and that he was going to issue a QC Non-Conformance Report (NCR) regarding these items. This QA Inspector reviewed the Request For Information (RFI) noted above and the sketch.

QC Inspector Bernard Docena informed this QA Inspector that ABF personnel were currently field drilling the various holes in the angle iron section and that no further welding was anticipated this date. This QA Inspector had previously reported issues regarding this location and the angle iron in Welding Inspection Report (TL-6031) dated 1/13/2011.

This QA Inspector verbally informed QA Lead Inspector, Bill Level and Structural Material Representative (SMR) Nicolai Hvass, of the issues noted above.

Longitudinal Diaphragm Access Opening, Contract Change Order (CCO) # 202:

This QA Inspector arrived at the Warehouse at Pier #7 and observed ABF welding personnel Gilbert Peralta (#9453) using a hand held torch to preheat the base material of a splice plate and a 25 mm thick attachment plate prior to tack welding two plate together. QC Inspector Bernard Docena was present monitoring the work. This QA Inspector observed QC Inspector Bernard Docena verify the preheat temperature with an electronic temperature gauge and verify the following SMAW parameters; 187 amperes. This QA Inspector observed a 4.0 mm diameter E7018H4R electrode was being used. The welding observed by this QA Inspector appeared to comply with ABF-WPS-D15-F1200A being used by the QC Inspector. This QA Inspector reviewed the drawing and observed it was not stamped approved and informed QC Inspector Bernard Docena of the observation. This QA Inspector observed the welding appeared to be completed late this shift and was informed by QC Inspector Bernard Docena the QC Inspections would be performed tomorrow, after the weld had cooled.

This QA Inspector informed SMR Bahjat Dagher of the work being performed on the project.

This QA Inspector received the following Weekly Welding Reports submittals; ABF-SUB-002561R10. This QA Inspector performed a review of the documents to determine compliance with the Welding Quality Control Plan (WQCP) submitted by the contractor, compliance with the applicable contract requirements and to determine if any Quality Control (QC) documents were missing. This QA Inspector documented the findings and informed QA Inspector Bill Levell of the findings. This QA Inspector completed a Review of Contractor's Submittal (TL-20) report for the submittal.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) personnel, QC personnel and Caltrans personnel during this shift. Except as described above there were no notable conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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Inspected By:	Hager,Craig	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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